

IN THE CLAIMS:

Please cancel claims 2, 4, 11, 12, 21, and 22, and amend claims 1, 3, 5-10, and 13-20, without prejudice or disclaimer, and add new claim 23-25. After the entry of the instant amendment, the pending claims will be:

1. (currently amended) A system Device allowing a swimming pool opening to be exposed and/or concealed based on low profile covers by a plurality of constituted by roof components (I) juxtaposed in the direction of the length of the swimming pool and each comprising consisting of a cover in a translucent material (400) and a rigid frame formed of at least two arches (210) placed in transverse planes and braced by longitudinal crosspieces (220) with two end crosspieces delimiting two longitudinal parallel edges (220a and 220b) to the roof component (I) and which rest on the longitudinal edges of the pool of the said swimming pool defining a support surface (S), the system comprising characterised in that it includes :

- a storage area located at an end of the pool storage means (600) located at one end of said pool and the storage area being sufficient to accommodate a footprint of a roof component, allowing the said roof components (I) to be stored in a stacked way, all of the storage area being horizontally displaced from the pool opening,

- a wheel configured to mobilize the means of mobilising said roof components, (I) allowing the roof components them to be displaced horizontally (arrow H) along the pool towards and/or away from the storage area said storage means (600),

- a lifter in the storage area, the lifter being configured to engage the roof components to vertically displace the stowing means (800) allowing the aforementioned roof components (I), disengaged from the pool, to be placed in the aforementioned storage, by positioning one roof component over another roof component means (600) and in a stacked position,

- a convex member attached to a first roof component in the plurality of roof components and a concave member attached to a second roof component in the plurality of roof components, configured such that a vertical displacement of the concave member relative to the convex member acts to engage the first roof

~~component with the second roof component and means (900) of connecting said roof components (I) to each other, indissociable on the one hand in order to secure them to each other to form a roof component train (I) able to be displaced integrally and horizontally (arrow H) along said pool, and dissociable one from another on the other hand, in order to allow the vertical displacement (arrow V) of said roof components (I) for the purposes of stacking in the aforementioned storage means (600) .~~

Claim 2 (cancelled).

3. (currently amended) A system ~~Device~~ according to claim 1, characterised in that the lifter comprises ~~aforementioned stowing means (800), allowing the aforementioned roof components to be placed in a stacked position inside the aforementioned storage means (600), are constituted by a support frame acting as a logic structure to at least two conveyors (810a and 810b) which, placed inside the aforementioned storage means (600) on either side of the stack of stored roof components (I), are able to grip and vertically displace (arrow V) inside the latter each roof component (I) in an upward movement to store them stacked one on top of the other and in a downward movement (reverse to that of the arrow V) to deposit them on the longitudinal edges of the pool (S) in order to juxtapose them one next to the other.~~

Claim 4 (cancelled).

5. (currently amended) A system ~~Device~~ according to claim 1, characterised in that the lifter comprises ~~aforementioned stowing means (800) are constituted by two ramps (840a and 840b) which, placed in the storage area (600) on either side of the stack of stacked roof components (I), are able to vertically displace (arrow V) in the storage area (600) each roof component (I) in an upward movement to store them stacked one on top of the other by means of a displacement of said components on the ramps by feeding them one underneath the other and in a downward movement (the reverse of that of the arrow V) so as to juxtapose them one next to the other.~~

6. (currently amended) A system Device according to claim 5, characterised in that these two ramps (~~840a and 840b~~) engage with pins projecting externally from the roof components (4) so as to make said components effect an upward movement and a tilt such that the stored roof components form an open angle opposite those coming to be supported on their lower surface by displacement imparted by said mobility means.

7. (currently amended) A system Device according to claim 1, characterised in that the aforementioned mobility means of said roof components (4) allowing them to be displaced horizontally along the pool towards and/or away from said storage means (600) are constituted:

- on the one hand, by running gear (710a) which, distributed over the width of the two parallel longitudinal edges (~~220a and 220b~~) of each roof component (4), ensures the free displacement (~~arrow-H~~) of the edges (~~220a and 220b~~) along the edge (S), and therefore of the whole of the component (4) associated with it,

- and on the other hand, by a ~~at least one~~ motor-drive roller (720a) which, placed at the input of the aforementioned storage means (600), is supported on the roof component (4) present in front of them so as to run it in a direction (~~arrow-H~~) outwards from the pool to make it completely enter the aforementioned storage means (600) so as to disengage it from the pool which it was covering and to store it in the latter in a stacked way or, in the other direction inwards towards the pool (~~reverse direction to that of the arrow-H~~), so as to discharge it from the storage area (600) by pushing the other components (4) which, in the form of a train of juxtaposed components, will gradually cover the pool opening.

8. (currently amended) A system Device according to claim 1, characterised in that the aforementioned mobility means of said roof components (4) allowing them to be displaced horizontally along the pool towards and/or away from said storage means (600), include at least one horizontal drive endless strip (~~740a and 740b~~) which, placed at the input of the aforementioned storage means (600), engage with the roof

component (I) present in front of them so as to run it in a direction (~~arrow H~~) outwards from the pool to make it completely enter the aforementioned storage means (600) so as to disengage it from the pool which it was covering and to store it in the latter in a stacked way or, in the other direction inwards towards the pool (~~reverse direction to that of the arrow H~~), so as to discharge it from the storage means (600) by pushing the other components (I) which, in the form of a train of juxtaposed components (I), will gradually cover the pool opening.

9. (currently amended) A system Device according to claim 1, further including a characterised in that the ~~aforementioned mobility means of said roof components (I)~~ allowing them to be displaced horizontally along the pool towards and/or away from said storage means (600), include a at least one translation mobilisation means (730a) of the ~~pinion (731a)/rack (732a) type~~, the pinion (731a) being drawn into rotation by a fixed geared motor unit and the rack (732a) being integral with the longitudinal edge of the roof component (I).

10. (currently amended) A system Device according to claim 1, further including characterised in that ~~each roof component is fitted with~~ blocks inserted between each stacked roof component.

Claim 11 (cancelled).

Claim 12 (cancelled).

13. (currently amended) A system Device according to claim 1 and allowing a pool opening to be exposed and/or concealed based on roof components, of the type wherein the arch (210) of the covering component (I) is fitted with a wing placed to project in the extension of the panels (100) to provide the sealed partial covering of the arch (210) of the juxtaposed covered component of the roof in the closed position, characterised in that each of the aforementioned connection means of two contiguous

arches (210r) for the covered roof component and (210e) for the covering roof component of the roof components (I) is constituted by a U-shaped profile (211) which, intended to conform to the shape of the rectangular lower profiles (212r and 212e) of said two contiguous arches (210r and 210e), is fastened to the rectangular profile (212r) of the arch (210r) of the covered component such that the rectangular profile (212e) of the arch (210e) of the covering component can be housed and inserted in the U-shaped profile (211) during the movement of lowering the covering component into the closed position and conversely to disengage itself from said U-shaped profile (211) during the movement of lifting the same component towards the open position.

14. (currently amended) A system Device according to claim 13 characterised in that the concave member ~~the upper part of the branch (211a) of the aforementioned U-shaped profile (211) not integral with the arch (210r) of the covered component~~ is flared so as to facilitate the engagement with play of the concave member with the convex member ~~rectangular lower profile (212e) of the arch (210e) of the covering component during its movement of lowering to a juxtaposed position.~~

15. (currently amended) A system Device according to claim 1 characterised in that the two conveyors (810a and 810b) of the aforementioned stowing means (800) are each constituted by an endless strip drawn in rotation (arrows R) around two return cylinders in the upper and lower part of the conveyors (810a and 810b) of the aforementioned storage means (600) and one of which is a drive cylinder to drive the endless strip around said cylinders.

16. (currently amended) A system Device according to claim 15 characterised in that the endless strips of the two conveyors (810a and 810b) of the aforementioned stowing means (800) are provided over their width with at least one chain of gripping mechanisms (811a and 811b) placed opposite each other for each endless strip (810a and 810b) so as to engage simultaneously with the two longitudinal parallel edges (220a and 220b) of each roof component (I) which is presented between them in the

storage area (600).

17. (currently amended) A system Device according to claim 16 characterised in that the aforementioned gripping mechanisms (811a and 811b) are embodied in hooks which are, on the one hand, evenly spaced out by a pitch "p" one from the other, and, on the other hand, adapted so as to engage with corresponding fastening means (221a) on the longitudinal parallel edges (220a and 220b) of the roof components (I) to allow the latter to be fastened or unfastened through the rotation (arrow-R) of the endless strips (810a and 810b) which ensures a linear vertical displacement (arrow-V) of the hooks (811a and 811b) associated with it over the rectilinear portion of said endless strips.

18. (currently amended) A system Device according to claim 7 characterised in that the aforementioned mobility means include two motor-drive rollers (720a) to ensure the horizontal displacements (arrow-H) of the roof components (I) by being supported on the two longitudinal edges (220a and 220b) of said roof components (I).

19. (currently amended) A system Device according to claim 18 characterised in that the axes of rotation (724a) of the aforementioned motor-drive rollers (720a) of the aforementioned mobility means are placed substantially inclined relative to the vertical and inwards towards the pool in such a way that the treads of said motor rollers are supported on the longitudinal edges (220a and 220b) of the roof components (I) while guiding the horizontal displacement (arrow-H) of said components (I).

20. (currently amended) A system Device according to claim 1 characterised in that it includes an electronic automatic control system for the motors driving the drive rollers (720a) and the motor cylinders of the endless strips (810a and 810b) which, as a function of final position detectors and a programmed control activated by the user, allows the horizontal linear (arrow-H) and vertical (arrow-V) displacements of the roof components (I) to be orchestrated according to an operational cycle which comprises

consists in alternating the horizontal (~~arrow H~~) and vertical (~~arrow V~~) displacement times of the roof components (I) and according to pitches corresponding:

- on the one hand for the vertical displacement (~~arrow V~~) of the endless strips (~~810a and 810b~~) and of the components (I) associated with them, to the spacing pitch "p" of two hooks (~~811a or 811b~~) on one and the same chain,
- and on the other hand for the horizontal displacement (~~arrow H~~) of said components (I) activated by the motor-drive rollers (~~720a~~), to a pitch at least equal to the width of the roof components (I).

Claim 21 (cancelled).

Claim 22 (cancelled).

23. (new) A system according to claim 1 wherein the lifter includes a conveyor.

24. (new) A system according to claim 23 wherein the conveyor includes two endless strips.

25. (new) A system according to claim 1 wherein the lifter includes a ramp.